

Chapter 14

EVERYBODY GETS TO WRITE ON THE WALLS: A LARGE GROUP RESPONSE TECHNIQUE

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PURPOSE

The large group response technique is a means to elicit, display and summarize responses of a large group of people to a set of questions. It was developed and successfully used by the Corps of Engineers in public workshops in South Florida in December 1993. Each workshop was attended by several hundred people. Some background on the context within which the process was used is provided in this paper; however, our major focus is the large group response technique, how it was used during those public workshops, and observations based on that experience.

BACKGROUND: CENTRAL AND SOUTHERN FLORIDA PROJECT COMPREHENSIVE REVIEW

The Central and Southern Florida (C&SF) Project is a series of canals, levees, pumps, and other structures across central and south Florida. In late 1992, Congress charged the U.S. Army Corps of Engineers to review the existing project to identify modifications that may be needed to improve environmental quality, water supply, and other purposes (Committee on Public Works and Transportation, 1992; Water Resources Development Act, 1992). Study funding was provided, and, in July 1993, the Corps initiated the Reconnaissance Phase of the C&SF Comprehensive Review Study (hereafter referred to as the Review Study). The Review Study's purpose was "to reexamine the Central and Southern Florida Project in light of current demands to determine the feasibility of structural or operational changes to the project essential to restoration of the Everglades and Florida Bay ecosystems while providing for other water related demands" (U.S. Army Corps of Engineers, 1993).

The purpose of a reconnaissance study is to define an area's water resource problems and opportunities as well as potential solutions; determine whether planning should proceed further into a feasibility phase; estimate feasibility time and costs; and assess non-Federal support in proceeding further (U.S. Army Corps of Engineers, 1990). By law, a reconnaissance phase study must be complete in no more than eighteen months (Water Resources Development Act, 1986).

The Review Study reconnaissance phase was designed to be accomplished by an interdisciplinary and inter-agency Study Team working through four major planning tasks:

problem identification, formulation of conceptual plans, evaluation of conceptual plans, and recommendations. In the first task of problem identification, "public concerns are identified, technical analyses are conducted to investigate the public and scientific concerns, and planning objectives and constraints are developed" (U.S. Army Corps of Engineers, 1994a). Additional background and information about conditions in central and southern Florida and the Corps study are presented in the Reconnaissance Report (U.S. Army Corps of Engineers, 1994c).

FIRST ROUND PUBLIC INVOLVEMENT

Because of the high visibility and interest in ecosystem restoration, the Study Team initially articulated two goals for the study's public involvement work: (1) gather input from diverse groups outside of the Corps of Engineers to assist in identifying problems and opportunities and potential solutions, and (2) develop relationships critical to the success of the study and the implementation of the study's recommendations. After the study began, a third goal of managing expectations was added in view of the intense publicity which surrounded the Review Study and the mounting anticipation of a solution that would be developed and implemented.

The overall strategy for public involvement was to focus on a communications effort which would solicit information from the public for the Study Team, and then provide feedback to the public on how the information was used. The primary means for accomplishing this exchange was to be through public workshops, which would support the major reconnaissance planning tasks. Three rounds of workshops were designed. The Round One public workshops were to provide information for the initial "problem definition" phase of the Review Study; Round Two workshops would focus on exploring alternative plans to solve the identified problems; and Round Three workshops would focus on presenting the array of alternative plans and study recommendations. Much like the Review Study's overall public involvement program, Round One activities reflected the collective ideas and criticisms of a cooperative effort among the Study Team and the study's Public Involvement Technical Input Group (which included representatives from the Corps, the South Florida Water Management District, and Everglades National Park).

Several objectives drove the selection of the design and the locations of the Round One workshops. First, the need to begin planning with public input about local problems and opportunities is a long-recognized principle in Corps water resources planning. As Hanchey (1972) noted:

"Quite frequently water resources projects have been rejected by the public because the planner and the public had a different view of the local problems which needed solution....Public participation techniques should provide the planner with an opportunity to test his perceptions of the local problems and needs by comparing them to those of a representative segment of the local community, prior to beginning the search for possible solutions."

Further, Creighton (1976) acknowledged that early public input is essential, rather than optional and advisory, for planning to succeed in addressing local concerns:

“If public participation is integral to the planning process then it will be similar to certain technical studies which must be completed as part of the planning process not because they are required by law, but because without the information derived from these studies decisions cannot be made. As the guidelines of one agency state: ‘The planning process should be designed so progression from one stage to another cannot take place without certain well-defined inputs from the public.’”

Accordingly, the primary purpose of Round One was to ask the public to help us accomplish the Review Study’s problem identification phase. Specifically, what did people perceive to be the problems and opportunities in the Everglades ecosystem? Second, in order for the public to understand why we were having workshops and asking for their help, we had to educate them about the study: why was it being done, and what was it supposed to accomplish? Third, we recognized the intense and often emotional nature of many people’s ideas and beliefs concerning the Everglades, and we needed to provide an open forum for anyone to express any views they wished to share with us. Fourth, the workshops needed to foster information exchange, specifically that members of the Study Team were able to have personal contact and understand the concerns of the various members of the public. Finally, we were also aware that government was viewed with some suspicion in South Florida, and that the process we designed could not depart radically from traditional public involvement activities.

In addition to our objectives, we also agreed to provide the South Florida Federal Science Sub-Group (a group of natural scientists from the Federal resource agencies) with meeting time during which they could inform the public about their recent scientific findings concerning Everglades restoration.

Because interest was high and the potential impacts of any solution could be geographically far reaching, the Public Involvement Technical Input Group initially identified locations throughout South Florida for six public workshops: Stuart, Okeechobee, Fort Myers, Clewiston, Fort Lauderdale, and Tavernier. After a number of requests from the public in the Miami area, we also scheduled a workshop for Coral Gables, a Miami suburb. Additional workshops to hear from particular special interest groups were scheduled in Clewiston (Everglades Agricultural Area interests), at Homestead (Dade County agricultural interests), and at Miami (local governments). The resulting ten workshops would ensure that at least one meeting would be easily accessible to what we perceived to be the region’s major public interests.

With these objectives in mind, we designed a four-part public workshop:

Part I - Presentation about the Corps C&SF Comprehensive Review Study (fifteen minutes) - The Corps' Study Manager would present an overview of the study and an explanation of the workshop format.

Part II - Problem definition workshop (sixty minutes) - The second part of the workshop was directed at eliciting the public's responses to the three questions at the heart of the study's problem definition task: What are the important ecosystem resources? What are the ecosystem's problems and opportunities? How would you recognize successful ecosystem restoration? The Study Manager would facilitate this part of the workshop, and the emphasis would be on "work" over a more formal public hearing approach.

Part III - Presentation about the Science Sub-Group Report (fifteen minutes) - Representatives from the Federal Science Sub-Group would present the background and findings from their November 1993 report on restoration of the Everglades ecosystem (Science Sub-Group, 1993).

Part IV - Public comment period - Participants would be provided the opportunity to speak for three minutes to present their ideas and views to all the workshop attendees. This part of the workshop would last until all attendees who wanted to speak had spoken.

The Study Team agreed that Parts I, III, and IV were to be straightforward and traditional. The Part I and Part III presentations were to be brief talks accompanied by slides. During Part IV, members of the public could speak from a podium at the front of the room. In anticipation of large crowds, we limited speakers to three-minute talks during Part IV to ensure that everyone had an opportunity to speak within a reasonable time.

In planning the Part II workshop, we focused on our purpose of eliciting the public's help in defining what the Corps Review Study should address. In addition, the Study Team considered several other factors in developing a workshop process. First, the process in Part II needed to be as objective and focused as possible so that the results would truly reflect public views, and would be the most useful in developing the study's planning objectives and constraints. Second, the intense public interest in the problems of Everglades ecosystem restoration could attract several hundred people to any given workshop. Therefore, the process should be successful with large groups. Third, given the controversial and often emotional nature of the situation, the process should at least initially avoid confrontations that could derail an entire workshop. Finally, the logistical problems and costs of conducting ten workshops encouraged us to find a modest, low-tech, friendly workshop approach that would minimize complications.

A process for the Part II problem definition workshop evolved from several planning sessions among the Study Team, the Public Involvement Technical Input Group, and others. This process, which we now call the "large group response technique," was adapted in part from two other meeting techniques that team members had experience using. First, the nominal group

technique (Delbecq et al 1986) was the basis for our opening steps in posing a question followed by silent idea generation by individuals. Second, the "wall walk" display process was drawn from practices developed by the Corps' Fusion Center, where a variety of large display techniques are used to exchange and discuss ideas within and among small groups (Devries, 1994). Our resulting process appeared to meet all of our major concerns, and we were confident that it was likely to succeed in meeting the study's problem definition needs.

LARGE GROUP RESPONSE TECHNIQUE

The large group response technique was developed and refined over the course of the Reconnaissance Study's problem definition phase. The following section describes the six technique steps (Table 1) that we used for the Round One workshops, including occasional suggestions about other assumptions or ways to accomplish specific tasks.

TABLE 1 - LARGE GROUP RESPONSE TECHNIQUE STEPS

Step 1 - Preparation

- Prepare meeting questions.
- Prepare work sheets (optional).
- Prepare moderator's script (optional).
- Select meeting site.

Step 2 - Setup

- Setup flip charts.
- Provide attendees with materials.

Step 3 - Questions and Responses

- Explain the procedure.
- State first question and write responses.
- Repeat question-response for remaining questions.
- Identify most important responses.

Step 4 - Wall Walk

- Display responses.
- Prepare summary of responses.

Step 5 - Summary

- Present and verify summary of responses.
- Discuss summary of responses.
- Collect responses (optional).

Step 6 - Analysis (optional)

Step 1 - Preparation

Two of the most important process tasks occurred prior to the Round One workshops: preparation of the questions to be asked and selection of the meeting rooms.

The Round One questions were developed through extensive debate and discussions among our Study Team members and the team's Public Involvement Technical Input Group. We recognized that the questions to be asked needed to be brief, direct, and carefully worded to ensure that they would lead to information that would be useful in the problem definition task. Our questions were developed over several months of debate; their evolution is illustrated in Table 2 on the next page. The resulting questions, and the reasons for including them, were:

QUESTION #1 - "What are the important resources in the South Florida ecosystem?" This question was included as a means of "scoping" the significant issues to be addressed in the Review Study, in the spirit of the National Environmental Policy Act's implementing regulations (Council on Environmental Quality, 1978).

QUESTION #2 - "What do you think are the problems and opportunities in the ecosystem?" This question was intended to elicit responses that could be used as the base for the study's planning objectives.

QUESTION #3 - "How will you recognize successful restoration of the ecosystem?" The final question was intended to help the team define results, even "targets," that could be used to measure progress in solving problems and realizing opportunities.

Because the moderator's remarks introducing each question can provide participants with examples and guidance about the types and detail of information requested, we prepared and rehearsed the Study Manager's dialogue for this part of the workshop as a part of our advance preparations.

We also elected to prepare a preprinted work sheet as the recording instrument for participants to write their responses to the three questions. The Round One work sheet consisted of a single sheet of yellow paper, with the front side divided into three equal sections marked 1, 2, and 3. The one-third page size of each "answer box" defined the length (and, to some extent, the detail) of expected responses. The back side of the sheet was marked for "other comments" and provided space to continue answers to the three questions as well as other ideas. Yellow paper was used so that the sheets would be readily identifiable for collection at the workshop sites; the Round One sheets naturally came to be called the "yellow sheets."

TABLE 2 - EVOLUTION OF QUESTIONS

31 August 1993

- What are the problems and opportunities in the study area?
- How do you know there is a problem?
- How will you know when it is fixed?

8 November 1993

- What are the important resources in the area?
- What are the resource problems and opportunities?
- How do you know about the problems and opportunities?
- How would you measure successful restoration?

22 November 1993

- What are the important resources in the South Florida ecosystem?
- Do you think there are any problems and opportunities in the ecosystem?
- What would a successful restoration of the ecosystem look like?

1 December 1993

- What are the important resources in the South Florida ecosystem?
- What do you think are the problems and opportunities in the ecosystem?
- How will you recognize successful restoration of the ecosystem?

15 December 1993 (from transcript of Fort Lauderdale workshop)

- What do you think are the most important resources that we have here in south Florida?
- What do you think are some of the problems and opportunities here in the south Florida ecosystem?
- How would you recognize successful restoration, and what does that mean to you?

The questions were not printed on the work sheet in order to focus participants solely on the questions, as they were presented during the workshop, and to evoke their first (and, therefore, presumably their most important) impressions. Preprinted work sheets are optional, and, in other instances, it may be just as easy to use blank notebook paper or other means to record participants' responses.

We should also note, however, that in publicizing the workshops, the notices included the three questions. Additionally, after the first workshop the questions were included in stories that appeared in local newspapers.

In addition to the "yellow sheet," we also preprinted take-home work sheets on green paper. The "green sheet" was identical to the "yellow sheet," except that the three questions were included in their respective "answer boxes" and a return mailing address was included on the back side of the sheet. The "green sheet" was made available to workshop participants as a method they could use to record and send us additional ideas and comments in the days after the workshops.

Our requirements for Round One meeting rooms were: first, flat writing surfaces and, second, ample room for participants to walk about and view flip charts from a distance. After considering a variety of different room arrangements, we selected school cafeterias, equipped with tables in a familiar lunch-room arrangement. The tables and chairs provided a less confrontational arrangement than the traditional auditorium style setup. The tables also enabled members of the study team to spread out maps and other materials during discussions with small groups of people before and after the workshops.

In other instances, other types of meeting sites, such as auditoriums equipped with retractable writing tables or rooms set up with tables and chairs, may also be effective. In some cases it may even be safe to assume that participants will arrive with a notebook or a pad of paper, and there will be no need to make provisions for writing surfaces.

Step 2 - Setup

Two setup tasks were required on the day of (usually immediately before) each workshop: setup of each participant's seating area, and flip chart setup.

Study Team members placed a yellow work sheet and a pencil on the cafeteria tables at each participant's seat. It may be safe to assume that participants will arrive with these materials. If not, a preprinted work sheet or blank paper and a pen or pencil will need to be distributed to each expected participant's seat.

Concurrently, other Study Team members assembled the flip charts on stands, and placed them in sets to form "walls" of writing paper. A separate set of charts was set up for each of the three Round One questions. Each set consisted of three stands (four stands for the larger workshops). The sets were located as far apart as practicable to reinforce the distinctions among questions and

minimize circulation congestion during the “wall walk.” A box of felt-tip marking pens and a roll of masking tape was included at each set of stands. In other uses of this technique where flip chart stands are not available or advisable, three or four adjacent sheets of flip chart paper or sheets of newsprint may be attached to the walls in various locations around the room (paper should be several layers thick to prevent ink from bleeding through onto the wall).

The Round One question to be answered during the Step 4 “wall walk” at each set of charts was displayed so that participants could see it from any place in the room. The questions were preprinted in bold six-inch high letters across poster boards that were easily attached to the tops of the flip chart stands. The questions were not displayed in advance of the Step 3 questions-responses so that participants would focus solely on the questions as they were presented. The preprinted displays were optional, and the questions could have been written on flip chart papers and displayed near the stands.

Step 3 - Questions and Responses

The Corps Study Manager led and facilitated the four-part Round One workshops. After completing the Part I study overview presentation, the Study Manager introduced Part II—the large group response technique—by explaining its purpose and the procedure the group would follow. Next, the Study Manager presented the following one-minute introductory explanation of the first question:

“As citizens of the United States, we enjoy a vast amount of natural resources. We take pride in the bald eagle, the Grand Canyon, and the California redwoods. These are what we share as nationally significant resources. Please think about the important natural resources in South Florida, and in the box numbered one on your yellow sheet, please list what you think are the important resources of the South Florida ecosystem.”

The participants were then given three minutes to complete their responses to the first question on their “yellow sheets.” This process of one minute explanations followed by three minutes of participant response on “yellow sheets” was repeated for the second and third questions; and, after less than fifteen minutes, each participant had completed their “yellow sheet” with their individual responses to the three questions. As the Study Manager introduced each question, a member of the Study Team displayed the question above its set of flip charts so that it was visible while responses were being written.

After the three questions were complete, the Study Manager asked the participants to review their responses to each question, and circle what they believed was their “most important” response to each question. Another three minutes was allowed for individual review and selection of responses.

Step 4 - Wall Walk

Next, the Study Manager instructed the participants to write their “most important” response to each question on the corresponding set of flip charts located around the meeting room. The Study Manager also stated that each circled (“most important”) response needed to be shown for each question, even if someone else had already written the same or a similar response. Participants then visited each set of charts and wrote their “most important” response, thereby producing a collective display of the group's ideas about the “most important” responses to the questions. This step became known as the “wall walk” part of the workshop.

During the Round One workshops, two Study Team members were stationed at each set of flip charts to ensure that participants received a marker and to otherwise provide assistance. Team members marked each page of flip chart paper with a brief code that indicated the workshop location, the question number, and the page number. Team members also removed pages as they were filled, and taped them to the wall next to the charts. Although we did not collect participants’ “yellow sheets” until the end of the workshop, collection boxes could have been placed at each set of charts for participants to deposit their work sheets after their last responses were written.

The “wall walk,” incidentally, provided attendees with opportunities to not only read, but also to discuss ideas with others. This was an especially important aspect of the Fort Lauderdale and Miami “wall walks,” where several highly charged exchanges among participants from urban and agricultural areas appeared to be the beginning of personal understandings among people who were traditionally in conflict with one another.

After all the participants wrote their “most important” responses, the Study Manager visited each set of flip charts; and, with assistance from attendant Study Team members, reviewed the responses and prepared notes that briefly summarized the results. The summary tended to capture the most frequent “top three” responses to each question; any apparent major areas of conflict among responses and the most creative response could be included.

Step 5 - Summary

With summary notes complete, the Study Manager asked the participants to return to their seats, and presented the summary of the responses to each question. This presentation was followed by group discussion of the results—what did the participants think about what they have seen displayed, and did they agree with the Study Manager’s summary? This discussion finished Part II of the workshop, and the workshop continued through the completion of Part III (Science Sub-Group Report presentation) and Part IV (general public comments). Many participants picked up a “green sheet” as they departed the meeting room.

Immediately after the conclusion of each workshop, the Study Team collected the completed “yellow sheets,” flip chart pages, and the Study Manager’s notes. During the week after the last

workshop, Team members prepared a notebook for each Round One workshop. The notebook included each workshop's "yellow sheets," as well as documentation from the Part IV public comment section of each workshop (prepared statements, transcript, and team notes on speakers' statements). Mailed-in "green sheets" and letters of comment were compiled in separate notebooks. In addition, the Study Manager's summary notes, as derived from each workshop's flip chart pages, were collected in a single Round One workshop synopsis. The synopsis, which is shown in Table 3, was sent to all participants and other interested parties about a month after the final workshop.

Step 6 - Analysis

The summary prepared during the meeting may provide an adequate conclusion and report of the workshop results, and no additional analysis may be desired. However, the completed work sheets may be a rich source of ideas that could be further investigated following the meeting. Analysis can range from simply reading the collective responses in order to be fully informed about participants (ideas), to key work and content analyses of responses.

Following the Round One workshops, the study team developed a data base of all of the workshop attendees' "most important" responses (reported in an *Inventory of Public Concerns*), and an ad hoc software program to analyze the responses (U.S. Army Corps of Engineers, 1994b). These tools permitted us to rapidly identify how frequently words were used, and listed all the public's statements about any given topic that was included in their "most important" responses. From these analyses, we synthesized the basic list of the team major areas of public concern, and prepared the detailed catalog of concerns that was included in the Reconnaissance Report (U.S. Army Corps of Engineers, 1994c). A brief description of each of the major areas of concern that were identified by our analysis is in Table 4.

Our analysis gave us enough of a sense of the public's priorities to permit a general ranking of concerns. However, we continually stressed that the process was not a voting exercise in which responses would be counted or compared. A count and comparison of numbers of responses would be meaningful only if the complete universe of a defined population participated in the process, for example, all attendees at a professional conference, or all members of a graduating class.

Several sophisticated computer software programs for text analysis are commercially available and could provide various types of findings and reports using large group response process documentation.

TABLE 3 - MOST COMMON RESPONSES TO WORKSHOP QUESTIONS

WORKSHOP LOCATION AND DATE	#1 - WHAT ARE THE IMPORTANT RESOURCES IN THE SOUTH FLORIDA ECOSYSTEM?	#2 - WHAT DO YOU THINK ARE THE PROBLEMS AND OPPORTUNITIES IN THE ECOSYSTEM?	#3 - HOW WILL YOU RECOGNIZE SUCCESSFUL RESTORATION OF THE ECOSYSTEM?
Stuart, FL Dec. 6, 1993	<ul style="list-style-type: none"> • water • Everglades • St. Lucie estuary • Indian River lagoon 	<ul style="list-style-type: none"> • growth • St. Lucie 	<ul style="list-style-type: none"> • balance • biodiversity • managed growth
Okeechobee, FL Dec. 7, 1993	<ul style="list-style-type: none"> • people 	<ul style="list-style-type: none"> • government agencies 	<ul style="list-style-type: none"> • balance • leave Kissimmee alone
Ft. Meyers, FL Dec. 13, 1993	<ul style="list-style-type: none"> • water • wildlife 	<ul style="list-style-type: none"> • pollution • ecosystem restoration 	<ul style="list-style-type: none"> • water • restoration of wildlife habitats
Ft. Lauderdale, FL Dec. 15, 1993	<ul style="list-style-type: none"> • people and families • water • ecosystem 	<ul style="list-style-type: none"> • population control • opportunity through coexistence between environment and development 	<ul style="list-style-type: none"> • health habitat • water quality • people • balance
Travertier, FL Dec. 16, 1993	<ul style="list-style-type: none"> • Florida Bay water quality 	<ul style="list-style-type: none"> • lack of water in Florida Bay 	<ul style="list-style-type: none"> • clean, fresh water
Local Government Workshops, Dec. 20, 1993	<ul style="list-style-type: none"> • water • Biscayne Bay • wetlands • people • quality of life 	<ul style="list-style-type: none"> • water management 	<ul style="list-style-type: none"> • balance • quality of life • growth • ecosystem
Miami/Coral Gables, FL Dec. 20, 1993	<ul style="list-style-type: none"> • people • families • agriculture • clean water • Everglades 	<ul style="list-style-type: none"> • overpopulation • loss of wetlands • water quantity and quality 	<ul style="list-style-type: none"> • healthy ecosystem • balance • jobs • sustainable development

TABLE 4- Summary of Public Concerns

Ecosystem. In general, the public recognized a decline in both the quality and extent of the South Florida ecosystem, particularly in the historic Everglades. They noted changes in habitats, such as the sawgrass, mangroves, and other native wetland habitats, as well as changes in hydrology and other physical characteristics. Many people believe that changes in historic sheetflow and hydro patterns brought about by man's water management activities, including the Central and Southern Florida Project, are important causes of ecosystem decline. People expressed concern about many native fish and wildlife species, such as herons, alligators, and lobsters, as well as endangered species, such as the Florida panther, manatee, and wood storks. The adverse effects of invasive non-native species, such as melaleuca, Brazilian pepper and Australian pine, were also of concern to many.

Growth. Another major public concern was growth of the human environment of South Florida, particularly the perceived problems of overpopulation and overdevelopment and their effects on the ecosystem and water resources.

Water quality. The public expressed concerns about environmental pollution, including water and air quality and solid waste disposal. Water quality concerns focused on six major areas: pollution of Lake Okeechobee, regulatory releases from Lake Okeechobee, outflow from the Everglades Agricultural Area, salinity in Florida Bay, urban water quality, and system-wide mercury pollution.

Water supply. Public perceptions concerning water supply problems and opportunities recognized three main water users: the environment, the urban areas and agriculture. Problems identified included conflicting demands among the water users, the waste of water, an inadequate water system, the need to increase the supply of water, and the need for water conservation to reduce water demands.

Balance. A major public concern dealt with the issue of balance. This idea was expressed in two general ways. First, many people believed that ecosystem restoration in South Florida will require balance between "man and nature;" many people spoke about the need for "sustainable development." Second, achieving balance will require the area's interest groups to cooperate and work together.

"They're the problem." In answering the question "What do you think are the problems and opportunities in the ecosystem?," a considerable number of people identified other people, other groups, other areas, other agencies, or others in general as responsible for problems in the South Florida ecosystem. In short, "they're the problem." Public responses about who they believed is responsible for problems

TABLE 4- Summary of Public Concerns (continued)

fell into two categories: government and others. Many people from the Kissimmee River area, the Everglades Agricultural Area, and the urban east coast simply asked to be "left alone."

Flood Control. Public concerns about flood control generally centered on preservation of existing flood protection provided by the Central and Southern Florida Project, in balance with the needs of the ecosystem. The Miccosukee and Seminole Indian Tribes expressed a need for improved flood protection on tribal lands.

Recreation. Several people described recreational navigation problems on the Okeechobee Waterway (St. Lucie Canal - Lake Okeechobee - Caloosahatchee River), particularly if water levels in the lake are changed.

Economy. Public statements about problems and opportunities in the south Florida economy covered the link between the economy and the ecosystem, major regional businesses--agriculture, commercial fishing and tourism--jobs, and the role of government. While many people recognized the need for a healthy ecosystem to support the region's economy and jobs (particularly tourism and Florida Bay), others were concerned that potential restoration projects would displace farms and other businesses and related jobs.

Social Considerations. Public comments covered many social considerations, including concern about communities, people, and social issues. As with the economy, there was some concern about potential restoration projects displacing communities and people.

Reference: U.S. Army Corps of Engineers 1994a

OBSERVATIONS

Although our experience has been limited to seven workshops for a single planning problem, we were pleased with the performance and results of our first use of the large group response technique. In reflecting on our Round One workshops, we believe the technique has the following benefits to offer anyone who wants to learn about the thinking of a large group:

Large Group - As we have tried to reinforce by its name, the technique works for a large group. As shown in Table 5, public attendance at the seven workshops where we used the technique ranged from 45 to 400. In contrast to a more traditional approach in which "large groups can be broken into small groups which can work effectively and then report back to large groups" (Delli Priscoli 1988), our approach maintained the integrity and dynamics of the single large group.

Quick - Full participation by a large group can be completed and results known in about one hour. Table 7 lists the duration of technique Steps 3, 4, and 5 as conducted during the Round One workshops.

Flexible - The overall four-part workshop agenda proved to be a flexible approach for the first round of the Review Study's public involvement program. When it became apparent that attendees did not wish to participate in the large group response technique (Part 2) at three of the workshops (the two workshops in Clewiston, and the Homestead workshop), it was readily deleted in favor of the attendee's desires to move as quickly as possible to the public comment period (Part 4). It might also be noted that many of the participants in these three workshops subsequently attended and were in favor of the process at other later workshops.

Our experience demonstrated the ease of using three questions which were relevant to our needs. The number of questions depends on the requirements of the meeting planner. Addressing only one or two questions at a meeting might seem inefficient, although there may be situations where only a single question is necessary or advisable. While more than three can be addressed with little increase in meeting time or cost, the quality of the participants' response may decline if too many questions are added.

Inexpensive - Costs are limited to the types of costs that are expected for any large meeting, including: staff salaries, meeting room rent, and expenses for materials such as flip charts and work sheets. Expenses for break-out rooms, small group facilitator, and recorders are eliminated. Additional costs to use this process over the traditional public meeting or workshop are minimal and may actually be reduced if facilitators for small groups were originally planned. Flip charts are usually available or the paper can be secured on the wall. There might be some small costs for supplies, such as printing or other materials. The optional additional data analysis may add cost to the overall effort if it is not already a part of the planned data gathering effort.

Low-Tech - The process can be completed using readily available materials and facilities that avoid mechanical, electrical, and operator problems that could be associated with more

sophisticated technology. Its simplicity is an advantage to participants who are not familiar with, or may even be hostile toward, more sophisticated procedural or computerized techniques.

Self-Recording - The process does not require a traditional "recorder." The process is self-recording by participants, and leaves a clear and immediate paper trail of results documented on the work sheets, flip chart pages, and the moderator's summary notes.

Easy - The steps are straightforward and easily explained and understood. The technique appeared to be accessible and accepted by individuals with a wide variety of experience, education, and interests. Required equipment, materials, and facilities are familiar, readily available, and not easily flawed. While forethought is necessary to prepare the questions and select the meeting site, no specialized training is needed to conduct the process. The special needs of any audience can be met with some forethought: bilingual translations, sign language for the deaf, or additional writing help for those who might need assistance.

Friendly - The technique is user-friendly and accessible to a wide variety of participants. People who attended our workshops appeared to enjoy the process and accept its results. Many were particularly pleased with being asked to publicly display their responses on the flip charts, as well as quickly being able to see and compare how others responded. It provided a forum for participation which did not entail public speaking which can be a deterrent.

Built Understanding and Trust - In describing the general principles of collaborative problem solving, Dunning (1986) noted:

"When people feel a sense of genuine participation in the decision making process, and they feel that their participation can make a difference in the outcome of a decision making process, they are more likely to participate seriously and cooperatively."

Because the Study Team went out early and asked people what they thought about the workshop, provided feedback on what was heard, and then used this information to move forward with the study, the process helped build a basis of understanding and trust between the team and the public. Additionally, because the venue was open and the process provided opportunities for people from varying backgrounds to come together, either at a table or at the flip charts, there was a greater understanding of the common feelings among the different groups. While the process is not meant as a consensus building effort, the sharing of these common concerns is one stepping stone to a widely acceptable solution.

Voluntary - While we observed some people leaving the workshops with their work sheets, it is reasonable to conclude that between about one-quarter and one-third of the attendees did not choose to complete a work sheet or write on the flip charts. We also observed a limited number of individuals who did not appear to complete a work sheet but wrote responses on the flip charts; or who completed a work sheet but did not display their answers on the flip charts; or who

only participated in the summary discussion or final public comment part of the workshop. The voluntary nature of the process accommodated this behavior without penalty to the participants. Note that, because we observed this behavior to be limited, we believe that it did not harm the validity of the overall group's results.

Credible - At the final Round One workshop, several members of the audience suggested that, because it was the last workshop and many people already knew what the questions were, the meeting should skip the questions and wall walk and instead move directly to hearing public comments. Several other attendees objected:

Unidentified Male: "At the other meetings, the Army Corps took control and conducted the meeting in a very professional and systematic type method so that all of the aspects, all of the study were heard. Why don't we do the same thing here?"

Unidentified Male: "These people that live here haven't had the opportunity that we've had."

The openness and visibility of the process quickly builds credibility among participants. Everyone is given the same instructions and accomplishes the same task at the same time. While the host controls the process, he/she does not influence the results. The results are neither hidden nor changed, and are immediately plain for all to see at the same time.

Ownership - Again, Dunning (1986) noted:

"The way in which something is decided often is as important as what is decided. When people have some ownership in the process which has generated a solution they are more committed to implementation of the solution than if it were imposed upon them."

By virtue of having written their responses in public—visible to their neighbors, friends, and adversaries—participants appeared to have a strong sense of ownership in the collective group results. Audience members would occasionally refer to the "wall walk" material as evidence of their case, or to emphasize their point, especially in addressing the Study Manager.

Increased Participation - This technique can substantially increase the percentage of people that provide information over traditional discussion or public comment forms of meetings. The significant increase in participation in the Round One workshops is illustrated in Table 5. Of the estimated 1,280 people who attended the seven workshops where the process was used, at least 67% of the attendees participated in the question-response exercise (as measured by collected work sheets), while only 13% of the attendees spoke during the final public comment part of each workshop. While there may have been more speakers in the absence of the question-response process, the results show that there was over a five-fold increase in participation using the Round One workshop approach. This rate of participation

TABLE 5 - WORKSHOP PARTICIPATION

Workshop Location and Date	Total Number of Workshop Attendees	Work Sheets Total Number of Worksheets Collected	Number Collected as a % of Attendees	Public Speakers Total Number of Speakers	Number of Speakers as a % of Attendees	Ratio of Worksheets to Speakers
Stuart, FL Dec. 6, 1993	90	64	71%	19	21%	3.4:1
Okeechobee, FL Dec. 7, 1993	140	82	59%	12	9%	6.8:1
Ft. Myers, FL Dec. 13, 1993	45	35	78%	7	16%	5.0:1
Ft. Lauderdale, FL Dec. 15, 1993	320	248	78%	34	11%	7.3:1
Tavernier, FL Dec. 16, 1993	240	156	65%	33	14%	4.7:1
Local Government (Miami), Dec. 20, 1993	45	28	62%	12	27%	2.3:1
Miami/Coral Gables, FL Dec. 20, 1993	400	243	61%	47	12%	5.2:1
TOTAL	1280	856	67%	164	13%	5.2:1

gave the Study Team improved confidence that we were hearing from a cross-section of the public rather than a traditional vocal minority of speakers.

Focused - In the case of the Round One workshops, the three questions served to clearly focus attendees' attention on the type of information that had been defined as necessary for the Review study. While people did not limit their responses strictly to the three questions or necessarily ecosystem-related issues, their answers were more directed than rambling, and consequently minimized our need to interpret their responses.

Provides Needed Information - When planning, the objectives that provide the bases for developing alternative plans are based on concerns expressed by the public. The Round One large group response process provided the necessary basis from which the Study Team was able to identify public concerns, and, in conjunction with supporting technical analysis, state the study's objectives and constraints (Table 5). The link between the public concerns identified through the large group response technique and the final study objectives and constraints is shown in Table 6. The public concerns, objectives, and constraints, as defined through this process, were included in the "Review Study News" (U.S. Army Corps of Engineers 1994a) that was distributed throughout South Florida in June 1994 prior to the Round Two public workshops, and became the basis for further work in the restoration of the South Florida ecosystem.

FURTHER DEVELOPMENT

This paper outlines a one-time experience with a large group response technique. Other applications which should be explored are:

Plenary Sessions - Conferences often feature plenary sessions in which the information is, for the most part, one-way. A speech or panel followed by the large group process could gather more feedback than a traditional ten-minute question period. For instance, the audience might be asked what is the largest barrier to implementing a speaker's suggestion.

Identifying priorities - At the remaining seven Round One workshops, while the large group response technique was consistently repeated with successful conclusions, the six-step process is also amenable to change. For example, although our Round One process was designed to end with a short list of results, participants could go on to identify their collective priorities for the results using, for example, the very visual "colored dot" ranking and scoring approach.

Repeat Usage - Our use of the large group response techniques was limited to one set of workshops, which were held over a two-week period. Research should be done on whether the process can be used repeatedly without becoming invalid or hackneyed.

Generating solutions - Another use for the process might be to take time to generate an extensive brainstorming list of solutions to problems. Next, ask participants to mark and share in the wall walk, the most creative, the most acceptable, and the least acceptable solutions.

**TABLE 6 - Public Concerns and Resulting Planning
Objectives and Constraints**

Public concerns about the ECOSYSTEM resulted in:

- Objective #1 - Increase the total spatial extent of wetlands.
- Objective #2 - Increase habitat heterogeneity.
- Objective #3 - Restore hydrologic structure and function.
- Constraint #1 - Protect threatened and endangered species.

Public concerns about WATER QUALITY resulted in:

- Objective #4 - Restore water quality conditions.
- Constraint #2 - Deliver water that meets applicable water quality standards.

Public concerns about WATER SUPPLY resulted in:

- Objective #5 - Improve the availability of water.
- Constraint #3 - Minimize salinity intrusion into freshwater aquifers.
- Constraint #4 - Minimize loss of water supply provided by the C&SF Project.

Public concerns about FLOOD CONTROL resulted in:

- Objective #6 - Reduce flood damages on Seminole and Miccosukee tribal lands.
- Constraint #4 - Minimize loss of existing flood damage protection provided by the C&SF Project.

Public concerns about RECREATION resulted in:

- Constraint #4 - Minimize loss of navigation opportunities provided by the C&SF Project.

Public concerns about the ECONOMY resulted in:

- Constraint #5 - Minimize regional and local disruption of jobs, and disruption of agriculture, tourism, commercial fishing, and other businesses.

Public concerns about SOCIAL CONSIDERATIONS resulted in:

- Constraint #5 - Minimize regional and local disruption of communities.

Public concerns about GROWTH, BALANCE and "THEY'RE THE PROBLEM" did not result in objectives or constraints, but were addressed through other study means.

Reference: U.S. Army Corps of Engineers, 1994c.

TABLE 7 - Time Requirements

Approximate durations of the large group response technique steps conducted during the actual course of the Round One workshops were:

Step 3 - Questions and Responses

Moderator explained procedure. 5 minutes

Moderator stated question #1 (identify important resources) and attendees wrote responses. 5 minutes

Moderator stated question #2 (identify problems and opportunities) and attendees wrote responses. 5 minutes

Moderator stated question #3 (describe successful restoration) and attendees wrote responses. 5 minutes

Moderator asked for identification of "most important" responses and attendees identified "most important" responses. 5 minutes

Step 4 - Wall Walk

Attendees wrote "most important" responses on flip charts, and moderator summarized results as the last responses were written. Duration of this step was a function of the number of attendees, as well as the amount of interaction desired among the participants and the Study Team. 15-30 minutes

Step 5 - Summary

Moderator presented and verified a summary of the "most important" responses, and attendees commented on and discussed results. Duration of this step was a function of the nature of the results. 5-15 minutes

TOTAL TIME 45-70 minutes

BIBLIOGRAPHY

- Committee on Public Works and Transportation, U.S. House of Representatives. Two Resolutions dated September 24, 1992.
- Council on Environmental Quality, Executive Office of the President. *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. Reprint 43 FR 55978-56007, November 29, 1978; 40 CFR Parts 1500-1508, 1978.
- Creighton, J. L. "A 'Thought Process' for Designing Public Involvement Programs in Planning." 1976. In Creighton et al. *Public Involvement Techniques: A Reader of Ten Years Experience at the Institute for Water Resources*. IWR Research Report 82-R1. Ft. Belvoir, VA: IWR, USACE, 1983.
- Delbecq, A.L, A.H. Van de Hen and D.H. Gustafson. *Group Techniques for Program Planning: A Guide to Nominal Group and Delphi Processes*. Middleton, WI: Greenbriar Press, 1986.
- Delli Priscoli, J. "Conflict Resolution in Water Resources: Two 404 General Permits." In *Journal of Water Resources Planning and Management*, Vol. 144, No. 1, January 1988.
- Devries, S. *Personal Communication*. Ft. Belvoir, VA: Fusion Center, Office of Strategic Initiatives, October 25, 1994.
- Dunning, C.M. *Collaborative Problem Solving for Installation Planning and Decision Making*. IWR Report 86-R-6. Ft. Belvoir, VA: IWR, USACE, 1986.
- Hanchey, J.R. "The Objectives of Public Participation." 1972. In Creighton et al. *Public Involvement Techniques: A Reader of Ten Years Experience at the Institute for Water Resources*. IWR Research Report 82-R1. Ft. Belvoir, VA: IWR, USACE, 1983.
- Science Sub-Group of the South Florida Management and Coordination Working Group. *Federal Objectives for the South Florida Restoration*. 1993.
- U.S. Army Corps of Engineers. "Policy and Planning." In *Planning Guidance*. Engineering Regulation ER 1105-2-100. Washington, DC: 1990.
- U.S. Army Corps of Engineers, Jacksonville District. *Central and Southern Florida Project Comprehensive Review Study, Reconnaissance Phase, Plan of Study*. Jacksonville, FL: August 1993, revised November 1993.
- U.S. Army Corps of Engineers, Jacksonville District. *Central and Southern Florida Project Review Study News*. Jacksonville, FL: June 1994 (1994a).

***Public Involvement
and Dispute Resolution***

U.S. Army Corps of Engineers, Jacksonville District. *Inventory of Public Concerns*.
Jacksonville, FL: January 1994 (1994b).

U.S. Army Corps of Engineers, Jacksonville District. *Central and Southern Florida Project,
Reconnaissance Report, Comprehensive Review Study*. Jacksonville, FL: November
1994 (1994c).

Water Resources Development Act of 1986. Section 905(b).

Water Resources Development Act of 1992. Section 309(l).